

substance is compatible with the organic binder used to make the conductive paste.

### SUPPORT FOR THE AMENDMENTS

The amendments to the claims are supported at page 6, lines 19-26. The amendment to the specification corrects a typographical error. No new matter is believed to be added by entry of these amendments. Claims 1, 3, 4, 6, 8, 9, 11, 13, 14, 16, and 18, 19, 21-37, 39-41, 43-45, 47-49, 51-53, and 55-57 are active.

### REMARKS

The rejection of Claims 1-20 and 43-58 under 35 U.S.C. § 112, second paragraph, is obviated in part by appropriate amendment, and traversed in part.

The Office states that it is unclear whether the term "organic vehicle", "organic component", and "organic binder" are equivalent terms. In addition, the Office indicates that it is not clear whether the terms "a solvent" and "an organic solvent" are equivalent terms.

However, Applicants respectfully submit that the present specification clearly distinguishes between these terms. For example, at page 3, line 26 to page 4, line 3, the specification states that "the composite substance ... comprises a solvent which is compatible with an organic component included in the conductive paste, and metal particles or metal-compound particles." Thus, the composite substance includes at least two components, a solvent and a metal particle (or, a solvent and a metal-compound particle), and the composite substance is itself a component of a conductive paste. At page 4, lines 6-7, the specification describes "an organic component included in the conductive paste." Thus, the conductive paste includes at least the composite substance and an organic component. At page 4 lines 18 and 19, the specification states that "the composite substance can be disbursed [sic;

dispersed] into an organic vehicle and an organic solvent to achieve a conductive paste.”

Thus, the composite substance is dispersed into an organic component, and the organic component comprises an organic vehicle and an organic solvent. Thus, the terms "organic vehicle" and "organic component" refers to a different and distinct component.

The present specification also distinguishes the terms “solvent” and “organic solvent.” For example, at page 7, line 23 to page 8, line 1, the specification states that the method of the present invention comprises “mixing the organic binder and the organic solvent with the composite substance” and that the composite substance comprises “a solvent being compatible with the organic binder ... and metal particles wetted with the solvent.” Thus the “organic solvent” and the “solvent” are different terms which refer to distinct components.

However, Applicants note that the terms “organic vehicle” and “organic binder” do refer to the same component. See, for example, page 4, lines 18-19 of the specification, which states that the conductive paste may be prepared by dispersing the composite substance into “an organic vehicle and an organic solvent”; and page 7, lines 23-26 of the specification, which states that the conductive paste may be prepared by “mixing the organic binder and the organic solvent with the composite substance.”

Claims 43, 47, 51, and 55 have been amended to recite "an optional second solvent" rather than "and/or a second solvent." Thus, the second solvent component may either be present or lacking in the compositions of these claims. Accordingly, Applicants respectfully submit that the claimed compositions are "specific" in regard to the ingredients.

In regard to withdrawn Claims 23-42, Applicants note that MPEP § 821.04 states, "if Applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims which depend from or otherwise include all the limitations of the allowable product claim will be rejoined." Applicants respectfully submit

that Claim 23 does, in fact, include all of the limitations of the allowable product claim (i.e., Claim 1) in that Claim 23 recites "adding a solvent to undried metal particles" and wherein "said solvent is compatible with an organic component included in said conductive paste." Likewise, Claim 29 recites "adding a solvent to undried metal-compound particles" wherein "said solvent is compatible with an organic component included in said conductive paste", as in Claim 6. Accordingly, Applicants respectfully request that Claims 23-42 be rejoined.

Accordingly, and for the reasons stated above, Applicants respectfully submit that the present application is now in condition for allowance. Early notification thereof is respectfully requested.

Respectfully submitted,

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IN THE CLAIMS

43. (Amended) A composite substance for forming a conductive paste, comprising:  
a first solvent, a surface active agent, [and/or] an optional second solvent, and metal particles,

wherein the first solvent is compatible with an organic component in said conductive paste, the second solvent is compatible with water and the first solvent, and the metal particles are wetted by the first solvent.

47. (Amended) A composite substance for forming a conductive paste, comprising:  
a first solvent which is compatible with an organic component included in said conductive paste;

a surface active agent, [and/or] an optional second solvent which is compatible with water and the first solvent; and

metal-compound particles wetted by said first solvent.

51. (Amended) A conductive paste comprising:

an organic binder;

a composite substance comprising a first solvent which is compatible with said organic binder, and metal particles wetted by said first solvent; and

a surface active agent, [and/or] an optional second solvent which is compatible with water and the first solvent.

55. (Amended) A conductive paste comprising:

an organic binder;

a composite substance including a first solvent which is compatible with said organic binder, and metal-compound particles wetted by said first solvent; and a surface active agent, [and/or] an optional second solvent which is compatible with water and the first solvent.

Claims 10, 15, 20, 38, 42, 46, 50, 54, and 58 (Canceled).

#### IN THE SPECIFICATION

Please amend the paragraph at page 4, lines 17-22 as follows:

In addition to disallowing aggregation of metal particles, the composite substance can be [disbursed] dispersed into an organic vehicle and an organic solvent to achieve a

- conductive paste, in an extremely smooth, consistent and speedy manner since the solvent of
- the composite substance is compatible with the organic binder used to make the conductive paste.